## AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 1 titled "CROSS REFERENCE TO RELATED APPLICATIONS" with the following new paragraph:

This application is a continuation of U.S. patent application Ser. No. 09/302,922 filed Apr. 30, 1999 by Caren et al. for "Fabricating Biopolymer Arrays", now U.S. Patent No. 6,323,043, from which priority is claimed under 35 U.S.C. 120. The foregoing application is incorporated herein by reference.

**Please replace the paragraph bridging pages 15 and 16, with the following new paragraph:**

The loading pressure is a negative pressure which will typically be less than the capillary pressure within a given jet during loading (for example, 10-90% of the capillary pressure), although allowances may need to be made for other factors such as the weight of the fluid column in a jet during loading (although in most fluid heads this will be negligible compared to capillary pressure). The mensiscus at an orifice 214 has a capillary pressure based on its curvature. To avoid air (or other ambient gas) from entering a delivery chamber 217 the meniscus should not move away from the end of an orifice 214. This basically implies that the value of the loading pressure should be below this capillary pressure. A suitable loading pressure for any particular apparatus can be readily determined by experimentation, simply by adjusting valve 94 until the required result is observed. That is, liquid to be loaded is drawn into reservoir chamber 222 without ambient atmosphere outside orifices 214 entering the delivery chamber 217 after the reservoir chambers have been loaded and there is no further fluid facing and adjacent the orifices 214. When too high a negative pressure is used, entry of ambient atmosphere into delivery chambers 217 can be observed directly or from the fact that the jets have lost their prime. When prime is lost, one way to regain it is to purge the head and reload it. The load setting of valve 84 can be recorded by processor 140 or can be set mechanically in valve 84. Suitable spotting, purge and holdoff pressures can also be readily determined by experimentation or calculation, and the corresponding settings of valves 84, 94 recorded by processor 140. Generally, the purging pressure is greater than the holdoff pressure which is greater than the spotting pressure, which is in turn greater than the loading pressure. For example, ambient pressure will typically be about 14.7 psia, the capillary pressure in a head of the above described type might be about 18 inches of water (0.65 psig), while the

loading pressure might typically be about 8 inches of water below atmosphere (that is, below ambient pressure). The holdoff pressure is greater than the capillary pressure, typically about 2 to 3 times the capillary pressure (for example, about 2 psig or 55 inches of water above atmosphere), while the spotting pressure is typically about 10-90% of the capillary pressure (for example, about 5 inches of water, or 0.18 psig, below atmosphere). The purging pressure will typically be many times the capillary pressure, for example about 10 to 12 psig or 275-330 inches of water above atmosphere. Description of the pressure adjustments is also provided in U.S. patent ~~application~~ no. 6,242,266 entitled "PREPARATION OF BIOPOLYMER ARRAYS", assigned to the same assignee as this application; ~~Attorney Docket No. 10980490 filed by A. Schleifer et al. on the same date as the present application.~~

Please replace the paragraph bridging pages 16 and 17 with the following new paragraph:

The apparatus of FIGS. 4 through 5 can fabricate arrays of different moieties, including arrays of different biopolymers, such as those illustrated in FIGS. 1 to 3. Operation of the apparatus to generate biopolymers will now be described although it will be understood that analogous methods can be used to generate arrays of other moieties. First, it will be assumed that tank 110 contains a suitable purging fluid (usually a buffered solution). It will also be assumed that drops of different biomonomer or biopolymer containing fluids (or other fluids) have been placed at respective notches 32 (or other drop retaining regions) of load station 30. This placement can be accomplished by manual or automated pipetting, or spotting of drops onto load station 30 using glass rods, which are of a volume required to load all of the pulse jets. Alternatively, as already mentioned, the flexible microtitre plate described in U.S. patent application "Method and ~~Aparatus~~ Apparatus for Liquid Transfer", Ser. No. 09/183,604, now U.S. Patent Application Publication No. 20030138968, could be used as load station 30. Also, pad 52 has been previously placed in cleaning station 50 and saturated with a suitable cleaning solution. Operation of the following sequences are controlled by processor 140 unless a contrary indication appears.